MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2022/2023 (TERM 2220)

BFM1014 – FUNDAMENTALS OF FINANCE

(All Sections/Groups)

14 JULY 2023
9.00 A.M – 11.00 A.M
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This Question paper consists of 4 pages with 4 Questions only.

2. Attempt **ALL** questions. All questions carry equal marks and the distribution of the marks for each question is given.

3. Please write all your answers in the Answer Booklet provided.

INSTRUCTION: Answer all questions

QUESTION 1

A. How is a corporation different from most of the other forms of business organizations? For any corporation, the primary goal of a Chief Financial Officer is to maximize the shareholder wealth. Briefly explain TWO (2) ways on how the CFO can do that. (7 marks)

B. Mr. and Mrs. Stark plan to buy a house worth RM 400,000 in the area of Kota Laksamana, Melaka. They managed to get a mortgage loan quotation from RHB bank to fully finance the purchase at 5% per annum for 30 years.

a. Calculate the monthly instalment of the financing. (6 marks)

b. Calculate the total payment that Mr. and Mrs Stark must pay to RHB bank. (4 marks)

c. Calculate the total interest earned by the RHB bank over the period of 30 years. (2 marks)

d. Briefly explain THREE (3) other factors that Mr. and Mrs. Stark need to consider before signing the mortgage loan. (6 marks)

(Total: 25 marks)

QUESTION 2

A. Why is capital budgeting such an important process in management decision making? Briefly explain TWO (2) reasons why are capital budgeting errors so costly? (8 marks)

B. Congratulations. You have just been appointed as a Finance Officer at Wangi Beauty Cosmetics Enterprise. Your first assignment is to evaluate two new cosmetic products line proposals. Both projects require an initial outlay of RM 110,000. The required return on both projects has been established at 12 percent. The expected cash flows from each investment are as follows:

	Products	
Year	Silky White	Rose Red
1	RM 20,000	RM 40,000
2	30,000	40,000
3	40,000	40,000
4	50,000	40,000
5	70,000	40,000

Continued...

In analyzing the assignment, answer the following questions. Please show your calculation.

a. What is the payback period on each investment? If Wangi Beauty Cosmetics Enterprise imposes a 3-year maximum acceptable payback period, which of these products should be accepted?
(5 marks)

b. Determine the Net Present Value (NPV) of each product. Which products should be accepted? Justify.
(7 marks)

c. Determine the Profitability Index for each product. Should they be accepted?
(5 marks)

(Total: 25 marks)

QUESTION 3

A. Explore Race Corporation just paid a dividend of RM 1.95 per share on its stock. The dividends are expected to grow at a constant rate of 4.1% per year, indefinitely. Investors require a return on this stock is 10.2%.

a. What is the current price? (3 marks)
b. What will the price be in 15 years? (3 marks)
c. If the investor buys the stock today with the intention to sell it after 15 years, how much is the expected capital gain. (2 marks)

B. Melaka Airport Berhad is in the midst of expanding and upgrading the facilities in Melaka International Airport. To raise capital for the project, the company is considering these options.

Items	Details
Debt	15,000, 8% coupon bonds outstanding, with 20 years to maturity and trading at 110 percent of par. Bonds make semi-annual payments and yield to maturity is 6.97%
Ordinary shares	250,000 shares outstanding, selling at RM65. The share has a beta of 1.10 and just paid dividend of RM3.50. The dividend is expected to grow by 6% every year indefinitely.
Preferred shares	80,000 units of 6% preferred shares outstanding, selling for RM100 per share.
Market	10% market return, 3.5% risk-free rate, and 30% tax rate.

Continued...

Based on the information above, estimates:

a. Cost of equity (ordinary share) (5 marks)
b. Cost of preferred shares (3 marks)
c. Cost of debt (2 marks)
d. Weightage Average Cost of Capital. (5 marks)
e. If the company required return on project is 8%, should the company proceed to the expansion and upgrading of the airport? Why? (2 marks)

(Total: 25 marks)

QUESTION 4

A. Quest Bhd. has an operating cycle of 80 days and a cash cycle of 40 days. Its account receivable period is 40 days. The beginning balance of its accounts receivable is RM11,000 while the ending balance is at RM15,000. Its beginning inventory balance is RM8,000 and the ending inventory balance is RM9,000. The beginning account payable is RM8,400.

a. What is the credit sale amount? (3 marks)
b. What is the cost of goods sold? (3 marks)
c. What is the ending account payable amounts of Quest Bhd. (3 marks)
d. List and briefly explain TWO (2) important factors that need to be considered before considering a credit facility. (4 marks)

B. Crafty Furniture Sdn Bhd specializes in custom-built dining tables, chairs, bedroom sets, office desks and many more. The company uses 2,500 logs fortnightly (every 2 weeks). This inventory is depleted fortnightly and subsequently reordered. The carrying cost per log is RM 250 and the fixed order cost is RM 8,000. Based on 52 weeks per year, evaluate Crafty Furniture Sdn Bhd's inventory management based on the current scenarios.

a. What is the total carrying cost? (2 marks)
b. What is the total restocking cost? (2 marks)
c. What is the total inventory cost? (2 marks)
d. What is the economic order quantity (EOQ)? (4 marks)
e. Is Crafty Furniture Sdn Bhd having an optimal inventory management? Justify. (2 marks)

(Total: 25 marks)

Continued...

APPENDIX

Future Value:

$FV = PV(1 + r)^t$

Annuities

$$PV = PMT\left[\frac{1-\frac{1}{(1+r)^t}}{r}\right]$$

$$FV = PMT\left[\frac{(1+r)^t-1}{r}\right]$$

Perpetuity: PV = PMT / r

EAR & APR

$$EAR = \left[1+\frac{APR}{m}\right]^m - 1$$

$$APR = m\left[(1+EAR)^{1/m} - 1\right]$$

Bond Pricing

$$\text{Bond Value} = C\left[\frac{1-\frac{1}{(1+YTM)^t}}{YTM}\right] + \frac{F}{(1+YTM)^t}$$

Stock Value

$$\hat{P}_0 = \sum_{t=1}^{\infty}\frac{D_t}{(1+R)^t}$$

Estimating Dividends

Zero growth: $P_0 = D / R$

Constant Growth Stock: $D_t = D_0(1+g)^t$

Dividend Growth Model:

$$\hat{P}_0 = \frac{D_0(1+g)}{R-g} = \frac{D_1}{R-g}$$

Nonconstant + Constant growth

$$\hat{P}_0 = \frac{D_1}{(1+R)^1} + \frac{D_2}{(1+R)^2} + \frac{D_3}{(1+R)^3} + \ldots + \frac{D_\infty}{(1+R)^\infty}$$

Net Present Value

$$NPV = \sum_{t=0}^{n}\frac{CF_t}{(1+R)^t} - CF_0$$

Cost of equity

$$R_E = R_f + \beta_E(E(R_M) - R_f)$$

WACC

$= E/V \times R_E + P/V \times R_P + D/V \times R_D (1 - T_C)$

Operating cycle

= inventory period + accounts receivable period

Cash Cycle

= Operating Cycle – Accounts payable period

EOQ Model

$$Q^* = \sqrt{\frac{2TF}{CC}}$$

End of Paper